

FIG 1 is a block diagram that shows a configuration of an auger type ice making machine provided with a control device according to Embodiment 1 of this invention,

FIG 2 is a partially cutaway side view that shows a configuration of an ice making portion of the auger type ice making machine,

5 FIGS. ^{3a}3 and 3b are timing charts that show motor current in Embodiment 1 during low voltage input and during high voltage input, respectively,

FIG 4 is a block diagram that shows a configuration of an auger type ice making machine provided with a control device according to Embodiment 2,

FIG 5 is a flowchart that shows operation of Embodiment 2,

10 FIGS. 6 to 8 are block diagrams that show a configuration of an auger type ice making machine provided with a control device according to Embodiments 3 to 5, respectively,

FIG 9 is a perspective view that shows a configuration of a rotational speed detector used in Embodiment 5,

15 FIG 10 is a flowchart that shows operation of Embodiment 5,

FIGS. 11 to 13 are block diagrams that show a configuration of an auger type ice making machine provided with a control device according to Embodiments 6 to 8, respectively, and

20 FIGS. 14a and 14b are timing charts that show motor current of a geared motor during low voltage input and during high voltage input, respectively.

DETAILED DESCRIPTION OF THE INVENTION

Embodiments of this invention are explained below based on the appended drawings.

25 Embodiment 1

FIG 1 shows a configuration of an auger type ice making machine provided with a control device according to Embodiment 1 of this invention. The auger type ice making machine has a refrigeration casing 1. An evaporation pipe 2 is wrapped around an outer circumferential surface of the refrigeration casing 1, and an auger 3 used for removing ice and
30 having a helical blade is supported in an inner portion of the refrigeration casing 1. The auger 3 is rotated by a DC brushless geared motor 4, for example.